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Glu Asp Asp Gly Glu Tyr Trp Cys Val Ala Glu Asn Gln Tyr Gly Gln
385                 390                 395                 400

Arg Ala Thr Ala Phe Asn Leu Ser Val Glu Phe Ala Pro Ile Ile Leu
                405                 410                 415

Leu Glu Ser His Cys Ala Ala Ala Arg Asp Thr Val Gln Cys Leu Cys
            420                 425                 430

Val Val Lys Ser Asn Pro Glu Pro Ser Val Ala Phe Glu Leu Pro Ser
        435                 440                 445

Arg Asn Val Thr Val Asn Glu Thr Glu Arg Glu Phe Val Tyr Ser Glu
    450                 455                 460

Arg Ser Gly Leu Leu Leu Thr Ser Ile Leu Thr Ile Arg Gly Gln Ala
465                 470                 475                 480

Gln Ala Pro Pro Arg Val Ile Cys Thr Ser Arg Asn Leu Tyr Gly Thr
                485                 490                 495

Gln Ser Leu Glu Leu Pro Phe Gln Gly Ala His Arg Leu Met Trp Ala
            500                 505                 510

Lys Ile Gly Pro Val Gly Ala Val Val Ala Phe Ala Ile Leu Ile Ala
        515                 520                 525

Ile Val Cys Tyr Ile Thr Gln Thr Arg Arg Lys Lys Asn Val Thr Glu
    530                 535                 540

Ser Ser Ser Phe Ser Gly Gly Asp Asn Pro His Val Leu Tyr Ser Pro
545                 550                 555                 560

Glu Phe Arg Ile Ser Gly Ala Pro Asp Lys Tyr Glu Ser Glu Lys Arg
                565                 570                 575

Leu Gly Ser Glu Arg Arg Leu Leu Gly Leu Arg Gly Glu Ser Pro Glu
            580                 585                 590

Leu Asp Leu Ser Tyr Ser His Ser Asp Leu Gly Lys Arg Pro Thr Lys
        595                 600                 605

Asp Ser Tyr Thr Leu Thr Glu Glu Leu Ala Glu Tyr Ala Glu Ile Arg
    610                 615                 620

Val Lys
625
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1.-**28**. (canceled)

29. A method of enhancing nerve growth or neuronal regeneration, comprising contacting a neuron with an inhibitor of low density lipoprotein receptor-related protein-1 (LRP-1) expression in the presence of a myelin-associated inhibitory protein, wherein the inhibitor of LRP-1 is an inhibitory nucleic acid.

30. The method of claim **29**, wherein the neuron is a central nervous system neuron.

31. The method of claim **29**, wherein the neuron is in vitro.

32. The method of claim **29**, wherein the neuron is in vivo.

33. The method of claim **29**, wherein the myelin-associated inhibitory protein is selected from the group consisting of myelin associated glycoprotein (MAG), oligodendrocyte myelin glycoprotein (OMgp), Nogo-A, Nogo-B, Nogo-C, ephrin-B3, Sema4D/CD100, repulsive guidance molecule b, and fragments thereof.

34. The method of claim **29**, wherein the inhibitory nucleic acid is delivered in a viral vector.

35. The method of claim **29**, wherein the inhibitory nucleic acid is selecting from the group consisting of an siRNA, an shRNA, an antisense RNA, or a ribozyme.

36. The method of claim **29**, wherein the inhibitor nucleic acid is an LRP-1 specific siRNA.

37. The method of claim **29**, wherein the inhibitory nucleic acid is an LRP-1 specific siRNA comprising the nucleotide sequence of SEQ ID NO: 9.

38. A method of enhancing nerve growth or neuronal regeneration in a subject in need thereof, comprising administering to the subject an effective amount of an inhibitor of low density lipoprotein receptor-related protein-1 (LRP-1) expression, wherein the inhibitor of LRP-1 expression is an inhibitory nucleic acid, and wherein the subject is a human.

39. The method of claim **38**, wherein the subject has experienced an injury to the central nervous system.

40. The method of claim **38**, wherein the subject has experienced a spinal cord injury.

41. The method of claim **38**, wherein the subject has experienced a traumatic brain injury.